

Precalculus
Graphing Review
NO CALCULATOR

Name _____

Graph the following. Label the axes. Provide the amplitude, period, phase shift, and vertical shift in the space provided. If any of these do not exist, write *none*. Show at least one complete period of each graph.

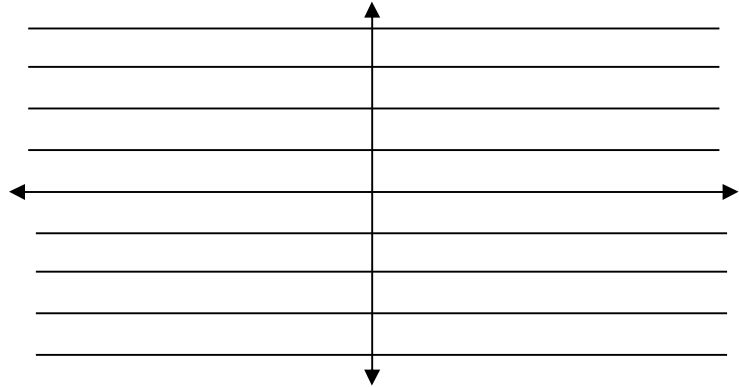
1. $y = 3\cos\left(\frac{1}{2}x\right) - 2$

Amp. = _____

Period = _____

H. S. = _____

V. S. = _____



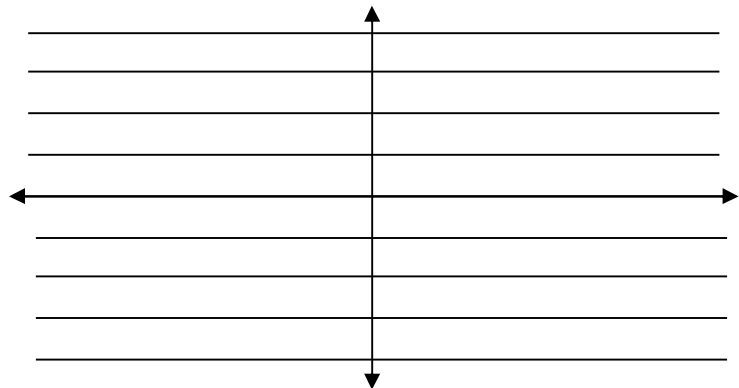
2. $y = -\frac{1}{3}\sin 2\left(x - \frac{\pi}{2}\right) + 2$

Amp. = _____

Period = _____

H. S. = _____

V. S. = _____



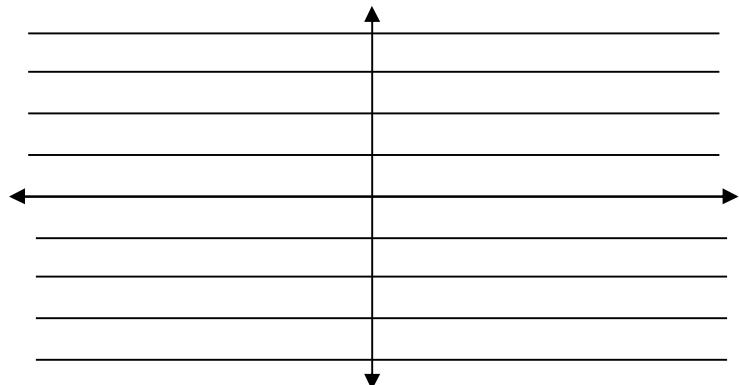
3. $y = \tan \frac{1}{2}(x + \pi) - 3$

Amp. = _____

Period = _____

H. S. = _____

V. S. = _____



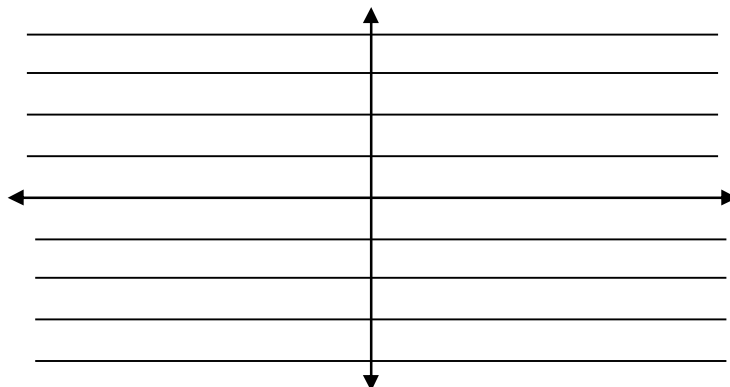
4. $y = 2\csc\left(\frac{1}{3}x\right) - 6$

Amp. = _____

Period = _____

H. S. = _____

V. S. = _____



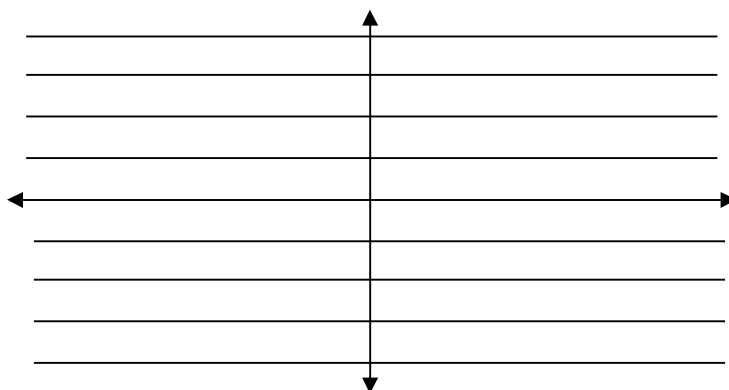
5. $y = 3\sec\frac{1}{2}\left(x - \frac{\pi}{4}\right) + 2$

Amp. = _____

Period = _____

H. S. = _____

V. S. = _____



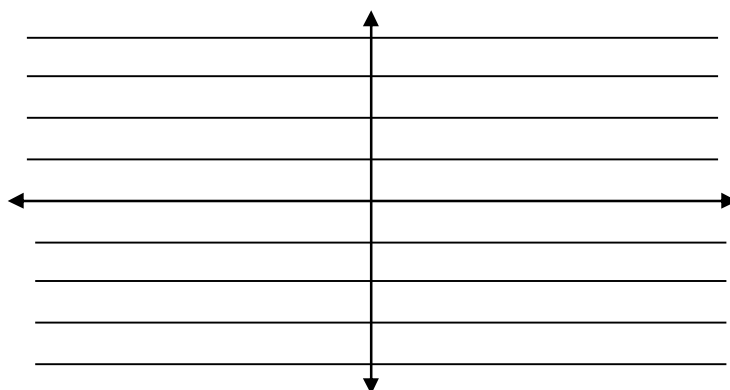
6. $y = \cot\frac{1}{2}(x) - 3$

Amp. = _____

Period = _____

H. S. = _____

V. S. = _____



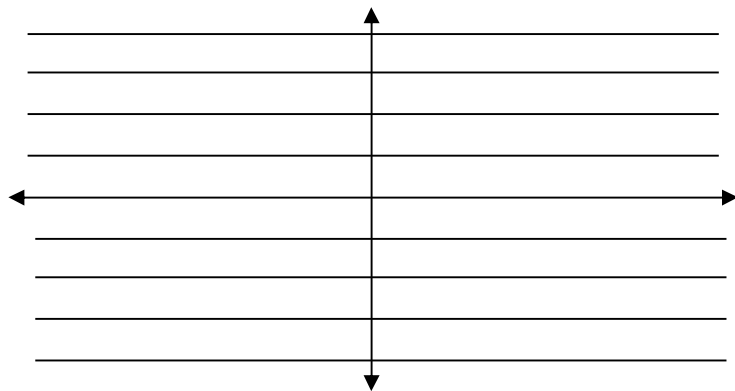
7. $y = 3\sin\frac{2\pi}{5}(x+1)+3$

Amp.= _____

Period = _____

H. S. = _____

V. S. = _____



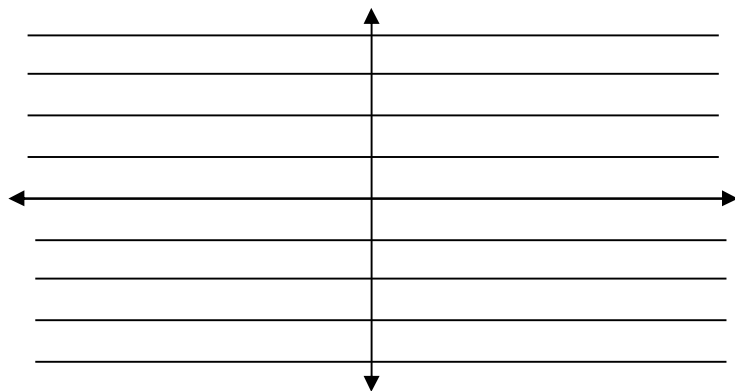
8. $y = -2\sec 2(x)+3$

Amp.= _____

Period = _____

H. S. = _____

V. S. = _____



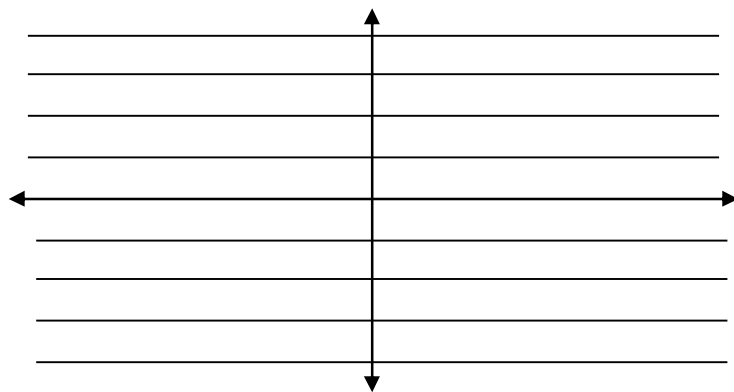
9. $y = \tan\frac{1}{3}(x)-3$

Amp.= _____

Period = _____

H. S. = _____

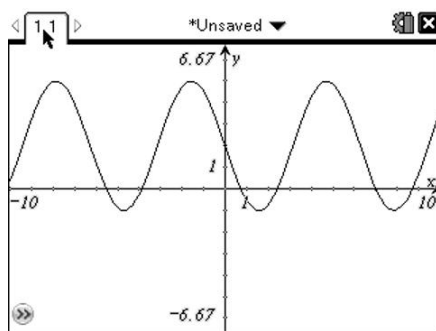
V. S. = _____



Write an equation for each of the graphs shown below. Use the indicated parent function.

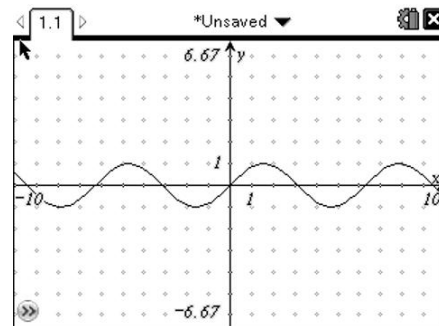
10. _____

$y = \sin x$



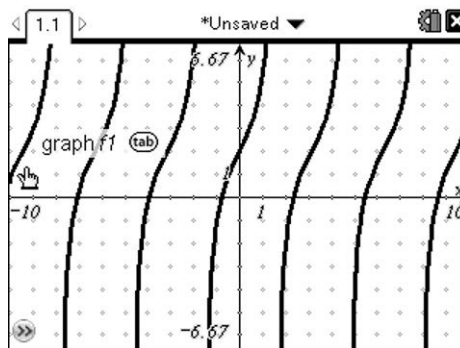
11. _____

$y = \cos x$



12. _____

$y = \tan x$



13. $\sin \frac{3\pi}{4} =$ _____

14. $\tan \frac{3\pi}{2} =$ _____

15. $\cos \frac{7\pi}{6} =$ _____

16. $\sin \theta = -\frac{\sqrt{2}}{2}$, $\theta =$ _____ (θ in radians)

17. $\cos \theta = \frac{1}{2}$, $\theta =$ _____ (θ in radians)

18. $\sin \theta = -\frac{2}{5}$ and $\tan \theta > 0$, $\cos \theta =$ _____ and $\cot \theta =$ _____

19. $\tan \theta = -\frac{3}{8}$ and $\sin \theta > 0$, $\cos \theta =$ _____ and $\csc \theta =$ _____

20. $\cos \theta = -\frac{7}{10}$ and $\sin \theta > 0$, $\tan \theta =$ _____ and $\csc \theta =$ _____